

TECHNICAL DATA SHEET

PV MODULE

GENERAL INFORMATION

Model	MODUL 180 TTBW SE42-005-xx-xx
Solar Cell Type	Mono crystalline silicon
Cell Efficiency	22.8%
Number Of Cells	64 cells: 4 parallel strings around skin surface, 16 cells per string
Diameter	181.80 mm
Length	2207 mm
Weight	18.75 kg
Glass Type	Borosilicate glass
Module Colour	Black

ELECTRICAL DATA

Installed cell power	$P_{MPP, cell} [W_p]$	218
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The output parameters for the **vertically mounted PV tubes** strongly depend on the installation site. Typical values are:
Nominal module output power

Nominal module output	$P_{MPP, [W_p]}$	45
Open Circuit Voltage	$U_{OC} [V]$	≤ 11
Short Circuit Current	$I_{SC} [A]$	≤ 5.5

TYPICAL ENERGY YIELDS FOR VERTICALLY INSTALLED PV TUBES

Vienna/AT (lat. 48.2°)	June December TOT/year	11.1 kWh/m 2.8 96 kWh/a
Rome/IT (lat. 41.9°)	June December TOT/year	12.3 kWh/m 6.6 122 kWh/a
Casablanca/M A (lat. 33.6°)	June December TOT/year	11.5 kWh/m 9.7 133 kWh/a
Sana'a/ YE (lat. 15.4°)	June December TOT/year	10.8 kWh/m 13.8 136 kWh/a

The modules are produced in accordance to the standards EN/IEC 612 15:2005 and EN/IEC 61730:2007 to withstand at least 25 years of operation.

STANDARD TEST PROCEDURES

UV Preconditioning Test	Intensity of 15 kWh/sqm
Thermal Cycling Test	200 cycles from -40°C to +85°C
Humidity Freeze Test	10 cycles from -40°C to +85°C at 85% RH
Damp Heat Test	1,000 h at 85°C and 85% RH

WARRANTY

Solar Module	10 years
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